

CLAIMS

What is claimed is:

1. An inkjet printing mechanism, comprising:

a media support which supports print media in a printzone;

a carriage which scans an inkjet printhead across the printzone; and

a heating element supported by the carriage.

2. An inkjet printing mechanism according to claim 1 wherein said heating element comprises a microwave heating element.

3. An inkjet printing mechanism according to claim 2 wherein said microwave heating element includes a first portion and a second portion, defining a heat zone therebetween.

4. An inkjet printing mechanism according to claim 3 wherein said heat zone scans synchronously with said carriage.

5. An inkjet printing mechanism according to claim 1 wherein said heating element comprises a radio frequency heating element.

6. An inkjet printing mechanism according to claim 5 wherein said radio frequency heating element includes a first portion and a second portion, a heat zone being positioned therebetween.

7. An inkjet printing mechanism according to claim 6 wherein said heat zone scans synchronously with said carriage.

8. An inkjet printing mechanism according to claim 1 further including a stationary blower producing an airflow directed at media when in the printzone.

9. An inkjet printing mechanism according to claim 1 wherein said heating element comprises a radio frequency applicator.

10. An inkjet printing mechanism according to claim 1 wherein said heating element comprises a microwave applicator.

11. An inkjet printing mechanism according to claim 1 wherein said printhead
5 directs ink droplets into said printzone and onto said media, and said heating element creates a heat zone at a surface of said media.

12. An inkjet printing mechanism according to claim 1 further comprising a
10 second scanning carriage, wherein said heating element has first and second portions each supported by said first carriage and said second carriage, respectively.

13. An inkjet printing mechanism according to claim 12 wherein said first and
second heating element portions define a gap therebetween, said gap comprising a heat
zone generated by said heating element.

14. An inkjet printing mechanism comprising:
a printzone;
a first carriage located on a first side of said printzone, said first carriage
supporting an inkjet printhead and a first heater element portion; and
20 a second carriage located on a second side of said printzone, said second
carriage holding a second heater element portion, said first and second heater element
portions forming a heater element.

15. An inkjet printing mechanism according to claim 14 wherein print media in
25 the printzone has a print surface exposed to the printhead to receive ink therefrom, and
has an opposing surface opposite the print surface.

16. An inkjet printing mechanism according to claim 15 wherein said first side of
said printzone faces the media print surface and wherein said second side of said
30 printzone faces the media opposing surface.

17. An inkjet printing mechanism according to claim 14 wherein said inkjet printhead projects ink droplets into said printzone as print imaging on media when in said printzone, said print imaging receiving heat energy from said heater element.

5 18. An inkjet printing mechanism according to claim 14 wherein said first heater element portion comprises a microwave energy source and a first portion of a waveguide; said second heater element portion comprises a microwave load and a second portion of a waveguide;

10 said first and second waveguide portions together forming a waveguide directing microwave energy from said source to said load; and said printzone occupies space between said first portion of said waveguide and said second portion of said waveguide.

15 19. An inkjet printing mechanism according to claim 14 wherein said first and second heater element portions cooperatively form a microwave applicator.

20 20. An inkjet printing mechanism according to claim 14 wherein said printing mechanism synchronously scans said first carriage and said second carriage to maintain a selected alignment therebetween.

25 21. An inkjet printing mechanism according to claim 20 wherein said heating element is a microwave heating element, with at least one of said first carriage and said second carriage holding a microwave load and the other one of said first carriage and said second carriage supporting a microwave source.

30 22. A method of applying print imaging by ink droplet deposition on media and drying said print imaging, the method comprising the steps:
reciprocating a carriage across a printzone;
projecting from said carriage ink droplets as said print imaging; and
projecting from said carriage radiant energy applied as heat energy to said media.

23. A method according to claim 22 wherein said method comprises the step of synchronously scanning a second carriage relative to said first carriage, said second carriage holding a heater element cooperative with said heater on said first carriage to apply said heat energy to said media.

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24. A method according to claim 22 wherein said heater is a microwave heater.

25. A method according to claim 22 wherein said heater is an RF heater.

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26. A method according to claim 22 wherein said placing step comprises controllably advancing media in a feed direction through said printzone.

27. A printing method, comprising:

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placing media in a printzone for print imaging;

reciprocating a carriage across said printzone;

projecting from said carriage ink droplets as said print imaging; and

projecting from said carriage radiant energy applied as heat energy to said media.

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28. A method according to claim 27 wherein said method includes synchronously scanning a second carriage relative to said first mentioned carriage, said second carriage holding a heater element cooperative with said heater on said first carriage to apply said heat energy to said media.

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29. A method according to claim 27 wherein said heater is a microwave heater.

30. A method according to claim 27 wherein said heater is an RF heater.

31. A printing method, comprising:

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applying ink having an evaporatable component to a print media; and

thereafter, moving a heat zone across said media to accelerate evaporation of said evaporatable component.

32. A method according to claim 31 wherein said moving comprising scanning a heating element across said media.

33. A method according to claim 31 wherein said applying comprising scanning a
5 printhead across said media.

34. A method according to claim 31 further comprising generating said heat zone using microwave heating.

10 35. A method according to claim 31 further comprising generating said heat zone from opposing surfaces of said media.

36. A method according to claim 31 further comprising generating said heat zone from RF heating.

15 37. A method according to claim 31 further comprising advancing said media through said printzone between each of a series of said applying and said moving.

38. An inkjet printing mechanism comprising:
20 means for reciprocating a carriage relative to a printzone;
printing means for applying print imaging to media in said printzone and supported by said carriage means; and
means for applying heat energy to said media and supported by said carriage means.

25 39. An inkjet printing mechanism according to claim 38 wherein said means for applying heat energy comprises a microwave energy source.

30 40. An inkjet printing mechanism according to claim 38 wherein said means for applying heat energy comprises an RF energy source.

41. An inkjet printing mechanism according to claim 38 wherein said printing means comprises an inkjet printing device projecting ink droplets therefrom.

42. An inkjet printing mechanism comprising:

a reciprocating printing device projecting ink droplets therefrom along a print swath, said print swath having a print swath height; and

5 a reciprocating heating element projecting energy therefrom and applied as heat energy to media adjacent thereto along a heat swath height, said heat swath height being greater than said print swath height whereby print imaging produced by said ink droplets receives said heat energy through at least a first and second reciprocation of said heating element.

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